

ENVIRONMENTAL WATER CAUCUS

BAY-DELTA ECOSYSTEM RESTORATION **FISCAL YEAR 1998 PROGRAM PROPOSAL AND JUSTIFICATION**

January 1997

1. INTRODUCTION

Congress has enacted and the President has signed the California Bay-Delta Environmental Enhancement and Water Security Act, P.L. 104-333, Div. I, Title XI, ("Title XI") a bipartisan measure that authorizes approximately \$430 million in new federal funds for extensive ecosystem restoration in California's Bay-Delta watershed. This bill not only enjoyed strong support from the Clinton Administration and virtually the entire California delegation, but reflects a consensus position among the local environmental, agricultural and urban stakeholder communities, as well as the Wilson Administration.

This coalition seeks FY 1998 appropriations for new Bay-Delta ecosystem restoration consistent with the new authorization in the amount of **\$143 million**. This paper provides background on the CALFED process, current funding issues, and a list of ecologically-based funding priorities from the perspective of the Environmental Water Caucus ("EWC").¹

2. BACKGROUND: WHAT IS THE CALFED BAY-DELTA PROGRAM?

California's Bay-Delta Estuary is unique on the planet. It is a 500 square mile region supporting an immense richness and diversity of aquatic and terrestrial species and habitats as well as substantial commercial and recreational fisheries. Simultaneously, the Delta serves as the primary water supply conveyance system for a massive agricultural economy and millions of municipal and industrial water consumers. The conflict between these competing uses has produced devastating species declines as historic ecosystem functions have been fundamentally altered or lost. Ecosystem concerns have in turn stalled efforts to improve water supply reliability facilities.

A major factor contributing to these problems, as well as the deadlock in remedying them, has been the myriad of overlapping and often conflicting federal and state mandates. In a historic effort to end this impasse, the federal government and the state of California have entered into a joint venture to craft a long-term Delta solution. The federal government has

¹ EWC is a caucus of national and regional conservation and fishing organizations including, but not limited to, Sierra Club, The Nature Conservancy, Natural Heritage Institute, Environmental Defense Fund, The Bay Institute, Save San Francisco Bay Assn., Pacific Coast Federation of Fishermen's Assns., Natural Resources Defense Council, United Anglers, California Waterfowl Assn. and various Audubon Society Chapters.

formed a Federal Ecosystem Directorate ("Club Fed") to coordinate federal policy,² and California similarly has convened a state Water Policy Council.³ Collectively, these agencies have formed the CALFED Management Group ("CALFED") under a framework agreement executed in 1994.

The long-term Bay-Delta solution is being developed under the auspices of a joint federal/state programmatic Environmental Impact Statement/Report ("EIS/R"). Primary responsibility for developing alternatives has been delegated by the CALFED agencies to a Bay-Delta Program staff ("Bay-Delta Program" or "Program"). The Program has been underway for approximately eighteen months and is largely focused on the EIS/R for the long-term program. The EIS/R will address four program elements: (1) ecosystem restoration; (2) water supply reliability; (3) water quality; and (4) natural disaster management. The Program has adopted a consensus-based approach to the development of each of these elements and has devoted considerable energy to public outreach and education.

3. THE BAY DELTA ACCORD AND CATEGORY III

The Bay-Delta Program enjoys support from a diverse stakeholder community largely due to the Bay-Delta Accord ("Accord") entered into on December 15, 1994. The Accord quieted years of acrimony by establishing an interim regulatory regime, water quality standards and endangered species protections, during which the longer-term solution could be developed. It also committed to the establishment of a fund to support ecosystem improvements in this near-term period of approximately \$180 million over three years.

The Accord provided that this "Category III" program was intended to be a mix of water user contributions along with some federal and state funds. However, only water user contributions have been available thus far. A Category III Steering Committee has struggled to develop a program to plan and fund useful activities consistent with the goals and objectives of the longer-term planning effort. The 1996-1997 spending decisions recently have been finalized, and the 1995 projects have begun to bear fruit.

4. PROPOSITION 204 AND Title XI: NEAR TERM SPENDING IS A PRIORITY

The CALFED agencies have established broad-based ecosystem restoration as a fundamental near-term priority. The Category III mandate to fund near-term activities is now merging to some extent with the longer term Bay-Delta Program objectives, including extensive coordination with the CVPIA and related Bay-Delta watershed restoration activities.

2 The agencies included are: the Bureau of Reclamation, the U.S. Fish and Wildlife Service, the Environmental Protection Agency, the National Fish and Wildlife Service and the Department of the Interior.

3 The agencies included are: the Department of Water Resources, the Resources Agency, the Department of Fish and Game, and the State Water Resources Control Board.

Ecosystem restoration activities require considerable lead time in order to produce species benefits. Given the complexity of the ecological systems at issue, an adaptive management approach -- one that allows for modification over time in response to new information -- is essential. Thus, there is a growing interest in providing early support for those restoration activities most likely to provide substantial ecological benefits or critical information.

California recently adopted Proposition 204, a \$995 million general obligation water bond containing about \$600 million for Bay-Delta ecosystem restoration efforts. Of this, \$60 million is designated as the State's share of the Category III program, and \$390 million is set aside as the state's initial contribution to the CALFED Bay-Delta Program's long-term ecosystem restoration program. Title XI, drafted with Proposition 204 in mind, authorizes the "initial" federal share of both Category III funding and the longer-term Bay-Delta ecosystem element. In conjunction with the stakeholder contributions to the Category III program, there is considerable impetus behind immediate funding to fulfill the spirit and intent of Title XI.

5. ECOSYSTEM RESTORATION OBJECTIVES AND TARGETS

It is EWC's position that restoration spending should be guided by science-based ecological objectives. Although far from complete, the Bay-Delta Program has made substantial progress in identifying objectives for species, habitats and ecological functions. The Program is also developing proposals to accomplish these objectives in the form of specific actions. For example, restoring tidal sloughs in the Estuary is a primary objective. Actions to accomplish this include removal of barriers to tidal flow into existing backwater sloughs in order to reestablish connections to major channels and river systems. Similarly, reducing barriers to fish passage in order to make spawning habitat more accessible is a major objective; dam removal or improvement projects at key locations should be supported as soon as possible. (The Category III program already has financed several dam removal and water supply replacement projects.)

EWC has prepared a list of potential restoration activities, or types of actions, that appear to be particularly appropriate for near-term FY 1998 funding based on the current status of the ecological objectives. *See Proposed Bay-Delta Ecosystem Restoration Activities for Newly Authorized Federal Funds in Fiscal Year 1998* (attached). This Attachment is a refinement and expansion of the budget matrices prepared by the CALFED Bay-Delta Program staff. It is generally consistent with CALFED's approach, but provides substantial additional detail and justification on areas appropriate for federal ecosystem funding in FY 1998 under the new authorization. The proposal focuses on: (1) demonstration projects to facilitate the long-term planning process; (2) early implementation to jump-start some of the more critical restoration actions; and (3) actions that preserve future restoration opportunities. It bears emphasis that this list reflects the mandate of Title XI limiting the new authorization to the ecosystem restoration element of the CALFED program, as opposed to the other three program elements.

6. ECOSYSTEM RESTORATION DECISION PROCESS

A major issue is how to establish ecologic priorities for near-term spending. As indicated above, until recently near-term spending in the form of the Category III program has been guided by a joint stakeholder/agency Category III Steering Committee. (Separate decisions regarding near-term CVPIA funding are delegated to the Fish and Wildlife Service with input from the stakeholder-initiated Restoration Fund Roundtable and other interests.)

The Category III Steering Committee is now giving way to a more formally constituted "Ecosystem Roundtable," consisting of a balanced group of stakeholders appointed by the CALFED Bay-Delta Program. The Ecosystem Roundtable is intended to work with the CALFED Management Group in an advisory capacity to coordinate near-term planning and spending for Bay-Delta restoration activities, including but not limited to the Category III funds. Guidance as to objectives and targets will be provided by the Bay-Delta Program.

Both Proposition 204 and Title XI anticipate that this Ecosystem Roundtable structure will serve as the primary decision forum for funds made available under these authorities, at least until some other entity is developed to take on this role. In sum, there are substantial benefits to be derived from targeted near-term spending *as long as such expenditures are driven by ecological priorities*. We are confident that priorities identified in the Attachment, as refined by the Ecosystem Roundtable process, are likely to produce meaningful ecological benefits while helping to avoid future ecosystem "train wrecks" and are, as such, worthy of immediate federal support.

7. PROPOSAL FOR FISCAL YEAR 1998

Baseline Funding Issues. Title XI authorizes new federal expenditures for Bay-Delta ecosystem activities "in addition to the baseline funding levels" established by the CVPIA and other relevant federal authorities. It is our understanding that the federal government's current estimate of the baseline funding level for such actions is approximately **\$80 million annually**. This figure includes a approximately \$32 million in annual Energy and Water funds for a variety of CVPIA-related activities. It also includes \$35-\$45 million per year collected from water and power user fees directed into the CVPIA Restoration Fund. The remainder is derived from miscellaneous federal appropriations.

Proposed New Initiatives. The attached proposal sets forth a program and rationale for "above baseline" ecosystem restoration expenditures of approximately **\$143 million** in FY 1998. The most efficient method for allocating these funds would be a "lump sum" appropriation to a single entity, perhaps in the form of a new Bay-Delta Watershed Restoration Trust, to be administered by the CALFED Bay-Delta Program in conformance with the authority provided by Title XI. However, to the extent that this option proves infeasible, EWC proposes that the total budget request be divided among the appropriate participating agencies. To ensure both programmatic continuity and the requisite authority, we further

propose the adoption and inclusion of standard conforming language for each participating agency approximately as follows:

Proposed Conforming Language for CALFED FY 1998 Appropriations Request:

\$ X to [Agency] for [Program or Activity], pursuant to and in conformance with the authority provided by the California Bay-Delta Environmental Enhancement and Water Security Act (Div. I, Title XI of P.L. 104-333). All funds appropriated under this section shall remain available until expended and shall be administered in accordance with procedures established by the CALFED Bay-Delta Program until Congress authorizes another entity that is recommended by the CALFED Bay-Delta Program to carry out this section.

Our specific program of activities to support the FY98 funding request is set forth below. A summary chart of proposed actions and funding levels is provided at the end of this document.

**PROPOSED BAY-DELTA ECOSYSTEM RESTORATION ACTIVITIES FOR
NEWLY AUTHORIZED FEDERAL FUNDS
in
FISCAL YEAR 1998**

The CALFED Bay-Delta Program has prepared a proposal for Bay-Delta funding in Fiscal Year 1998 entitled *Overview: Proposed Fiscal Year 1998 Program Activities and Cost Estimate* (Jan. 6, 1997). The Program has also issued a companion 5-year budget document, *Overview: Proposed Five Year Program Activities and Cost Estimate* (Jan. 21, 1997), which provides more generalized estimates of activities and costs for early implementation projects and programs for each of the fiscal years 1998-2002. Neither document provides express detail on related efforts, such as anticipated ecosystem restoration activities and costs under the 1992 CVPIA. The FY98 *Overview* is intended to set forth an overall Program budget for "early implementation" projects and programs in FY98, involving both the newly-authorized federal and non-federal funds. While activities under the Ecosystem Restoration element of CALFED mandate are its predominant focus, the FY98 *Overview* also includes anticipated (and predominantly non-federal) outlays under the CALFED Water Quality, Water Use Efficiency, and Levee System Integrity elements.

The following proposal is a refinement of the FY98 *Overview* based on the collective priorities and perspectives of the member organizations of the Environmental Water Caucus. Consistent with Title XI, this refinement focuses on the pending request for new federal funds in FY98 as part of the CALFED Ecosystem Restoration element.⁴ As discussed above, EWC's proposal sets forth a program and rationale for "above baseline" ecosystem restoration expenditures of approximately **\$143 million** in FY 1998. Each section of the program justification begins with a summary of the underlying "ecological objectives" in order to link proposed action to the Ecosystem Restoration objectives which are currently being developed and refined by the CALFED Bay-Delta Program. Also, while this refinement is generally consistent with the major category cost estimates for new federal funds included in the FY98 *Overview*, it expands upon the overall request to take full advantage of the \$143.3 million authorized by Title XI in FY98.⁵

It should be noted that the 1997 New Year's floods present a host of potential opportunities to address Bay-Delta flood management needs, and to minimize future flood damages, as part of a well-designed and well-funded Ecosystem Restoration program. Accordingly, specific related activities proposed for FY98, such as land acquisitions, levee setbacks, and the re-establishment of floodplains and meander belts, are indicated by a double

⁴ The proposal does include a small amount of funding under the authority of Title XI that would fall under the CALFED Water Quality element which assumes direct, specific, and verifiable ecosystem restoration benefits.

⁵ As a practical matter, it is likely that at least some portion of the total amount requested (and hopefully appropriated) will end up being carried over into FY99. This is simply the nature of a large-scale, multi-year restoration effort, as anticipated by the plain language of Title XI. The ready availability of funds in FY98 will have a positive and stimulating effect on the design and implementation of viable restoration projects and programs.

asterisk (**) in the following text.

A. Habitat Acquisition and Restoration

Total FY '98 Funding Request for Habitat Acquisition and Restoration Element: \$86 million to be provided either through a CALFED Bay-Delta Program Restoration Trust or distributed to individual agencies for the actions listed below: USFWS, USDA, COE, NFWF, USBR and USEPA and perhaps others as appropriate.

Ecological Objectives: Restore a healthy ecosystem and begin to restore conditions necessary to support native species of concern (listed or potentially endangered species) by conserving and restoring habitat and natural system functions including, but not limited to: (1) natural hydrologic and geomorphic patterns; (2) natural vegetative succession patterns; (3) spawning, nesting, foraging, rearing, brooding and cover habitat; and (4) increased food web productivity.

1. Delta Habitats

**** Action:** Design and implement research and development projects aimed at developing ecologically effective and cost efficient methods of restoring freshwater tidal marshes and slough channels, especially on shallower islands in the eastern, central, and northwestern Delta, and the west shore of the Sacramento River and lower San Joaquin River.

**** Action:** Acquire lands and/or easements and restore floodplain wetlands in the Consumnes and Mokelumne watersheds.

Action: Acquire lands and/or easements in areas which supplement or enhance existing core wetland habitat areas in the Delta region.

**** Action:** Acquire lands and/or easements on deeply subsided lands in the western and/or central Delta in order to preserve opportunities for long-term restoration of freshwater tidal marshes, slough channels, and other desirable habitat types.

Action: Design and implement experimental projects to initiate long-term subsidence reversal and freshwater tidal marsh restoration on deeply subsided lands in the western and central Delta.

Action: Design and implement demonstration projects to restore emergent vegetation and shallow shoals in existing sloughs and channels, especially in the western, northwestern and central delta.

**** Action:** Design and implement demonstration projects to restore shaded riverine

aquatic and riparian forest and woodland habitat, particularly in the northern and eastern Delta.

Action: Acquire lands and/or easements to assist in restoring or enhancing managed seasonal wetlands and associated upland habitats.

2. San Francisco Bay and Wetlands

Action: Design and implement demonstration projects to restore brackish tidal wetlands and slough channels with natural salinity gradients at creek mouths. Critical areas are Suisun and San Pablo Bays, including Petaluma and Napa Rivers, Carquinez Straits, and in areas of the Suisun Marsh.

Action: Design and implement demonstration projects to restore riparian and floodplain corridors along key streams, including but not limited to the Napa and Petaluma Rivers, and Sonoma, San Antonio, Novato, Miller, Wildcat and San Pablo Creeks, and Suisun Bay tributary streams.

Action: Acquire lands and/or easements in areas which supplement or enhance existing core wetland habitat areas.

Action: Acquire lands and/or easements in diked baylands for restoration to brackish or saltwater tidal wetlands where appropriate.

Action: Design and implement demonstration projects to restore diked baylands to tidal wetlands.

3. Sacramento River Watershed Habitats

**** Action:** Acquire lands and/or easements within existing meander corridor along the mainstem Sacramento River between Colusa and Red Bluff.

**** Action:** Design and implement projects to restore shaded riverine aquatic habitat and riparian forest and woodland habitats on the mainstem Sacramento River, tributaries and bypasses.

**** Action:** Design and implement research and development projects aimed at developing new techniques of restoring the geohydrologic processes of the meander corridor.

**** Action:** Initiate studies regarding the feasibility of reconfiguring major Sacramento River bypasses and managing for various habitat types. For example, to establish floodplain wetlands along the Colusa Drain and Sutter Bypass, or to modify Yolo

Bypass to enhance spawning and rearing habitat and establish riparian woodland habitat.

- ** Action: Design and implement demonstration projects to restore natural channel functions within reaches of Sacramento River tributaries adversely impacted by gravel mining.

Action: Acquire lands and/or easements to assist in restoring or enhancing managed seasonal wetlands and associated upland habitats.

4. San Joaquin River Watershed Habitats

- ** Action: Design and implement demonstration projects to restore natural channel functions within reaches of the San Joaquin River Tributaries adversely impacted by gravel mining, grazing, and the encroachment of agricultural development in the floodplain.

- ** Action: Design and implement demonstration projects to restore shaded riverine habitat on the lower reaches of the Stanislaus, Tuolumne, and Merced rivers.

- ** Action: Study the feasibility of restoring meander belts in the lower San Joaquin River and its major tributaries.

Action: Acquire lands and/or easements to assist in restoring or enhancing managed seasonal wetlands and associated upland habitats.

B. Fish Screening and Passage

Total FY '98 Funding Request for Fish Screening and Passage Projects: \$15 million to be provided either through a CALFED Bay-Delta Program Restoration Trust or distributed to the following agencies for their actions listed below: USFWS; NFWF; and USBR, and perhaps others as appropriate.

Ecological Objectives: Restore a healthy ecosystem and assist in the recovery of animal and plant species of concern (listed or potentially endangered species) by improving migratory corridors and natural system functions including, but not limited to: (1) increasing access to spawning habitat areas; (2) reducing direct mortality; (3) facilitating fish passage. In all cases, priority should be given to projects and programs that benefit multiple species or habitats (e.g., screening or relocation of diversion works that supply water to managed or seasonal wetlands).

1. Delta region

Action: Initiate first phase program to install fish screens on Delta water diversions, and to consolidate and/or relocate diversion sites where feasible.

2. Sacramento River and tributaries (esp. Mill, Deer, Butte, Clear, and Battle Creeks)

**** Action:** Design and implement demonstration projects to replace dams with "fish friendly" diversion facilities, and to remove obsolete dams and other obstructions where appropriate.

Action: Initiate the first phase of program to install fish passage structures on existing facilities, and to consolidate and/or relocate diversion sites where feasible.

Action: Initiate first phase program to install fish screens on water diversions, and to consolidate and/or relocate diversion sites where feasible.

3. San Joaquin River and tributaries

Action: Initiate first phase program to install fish screens on large water diversions on the mainstem San Joaquin River, and to consolidate and/or relocate smaller diversions where feasible.

C. Exotic Species Management

Total FY '98 Funding Request for Exotic Species Management Element: \$2 million to be provided either through a CALFED Bay-Delta Program Restoration Trust or distributed to the U.S. Coast Guard and/or Port Authorities and perhaps other agencies as warranted.

Ecological Objectives: Assist in the recovery of animal and plant species of concern (listed or potentially endangered species), by: (1) limiting or controlling threats to native species created by exotics; and (2) protecting native species biodiversity.

Action: Control exotic species by regulating and enforcing ballast discharge requirements in the Delta, Suisun Bay and San Pablo Bay.

Action: Identify and target a few especially problematic exotic species and mount an eradication effort.

D. Integrated Monitoring, Research, and Adaptive Management

Total FY98 Funding Request for Monitoring Element: \$10 million to be provided through a CALFED Bay-Delta Program Restoration Trust or distributed to appropriate agencies or a coordinating interagency management group.

Ecological Objectives: To assist in the overall recovery and sustained health of the Bay-Delta watershed systems by (1) monitoring key indicators of ecosystem health; (2) comparing indicator levels with protection and restoration targets and objective; (3) carrying out research to identify factors impeding ecosystem recovery or contributing to declines in ecosystem health; (4) adjusting management measures as appropriate to ensure that targets are met given new information; (5) implementing management experiments to reduce risk to ecosystem health while reducing uncertainty about causal factors and/or the efficacy of various management measures; (6) providing a mechanism for accountability.

Action: Design and implement a monitoring program to establish and refine specific restoration design criteria for key habitat types. Examples include establishing initial ground elevations and peat formation rates for freshwater tidal wetlands; riparian tree planting and need for grading floodplain terraces.

Action: Document performance and evolution of existing restored sites of key habitat types to guide in establishing initial restoration and management criteria.

Action: Develop an integrated monitoring and research program with a centralized database to address key uncertainties and hypotheses, archive data and make them accessible, and to monitor progress toward targets.

Action: Develop operational definition of ecosystem health and indicators of it at the landscape, habitat, and species scales.

Action: Develop quantitative ultimate targets for ecosystem health (including performance measures for specific projects).

E. Water Acquisition

Total FY '98 Funding Request for Water Acquisition Element: \$20 million to be provided either through a CALFED Bay-Delta Program Restoration Trust or distributed to individual agencies (see below).

Ecological Objective(s): Protect and restore instream, riparian, wetland, and estuarine environments (including newly restored habitats) by improving the quantity and timing of Delta inflows and outflows, with a long-term goal of more closely approximating natural hydrologic patterns wherever possible in order to improve the migration of juvenile and adult fish; support high-quality freshwater and brackish wetlands and shallow shoal habitat for spawning, rearing, foraging and cover; sustain the aquatic food web by enhancing primary and secondary productivity, energy transfer, and nutrient cycling; and contribute to efforts to achieve not less than a sustainable doubling in the natural production of anadromous fish.

- ** Action:** Acquire, from willing sellers, and manage for the above purposes, a diverse portfolio of permanent or long-term water supplies, water rights, and related interests by purchase, lease, option, contract, easement, or other available means, especially for permanent/long-term water.
- ** Action:** Provide supplemental pilot program funds for permanent or long-term water acquisitions in conjunction with related state and federal efforts under the Conservation Reserve Enhancement Program.

F. Ecosystem Water Quality

Total FY '98 Funding Request for Water Quality Element: \$10 million to be provided either through a CALFED Bay-Delta Program Restoration Trust or distributed to USEPA, USDA, and perhaps other agencies as appropriate. (Funds proposed under the authority of Title XI as part of the CALFED Water Quality Common Program must provide direct, concurrent, specific, and verifiable ecosystem restoration benefits.)

Ecological Objectives: To assist in the recovery of animal and plant species of concern (listed or potentially endangered species) by directly providing or enhancing habitat and by preventing and/or reducing toxic or other harmful elements from entering aquatic environments in the Bay-Delta watershed

Action: Initiate non-point source pollution control programs on a watershed scale to reduce toxic discharges in the Bay-Delta watershed. Activities could include: (1) acquisition/conversion/retirement of actively irrigated drainage problem lands; (2) implementation of agricultural or range-management practices that result in verifiable water quality improvements and enhanced wildlife habitat; and (3) reimbursement for agricultural and range management practices that verifiably improve water quality and enhance wildlife habitat as part of an approved "safe harbor" program.

For additional information relating to this proposal, please contact Cynthia Koehler of the Natural Heritage Institute (415-288-0550), Leslie Friedman-Johnson of The Nature Conservancy (415-281-0427), or David Yargas of the Environmental Defense Fund (510-658-8008).

Ecosystem Restoration

A. Habitat Acquisition and Restoration

	CALFED All	CALFED Federal	EW Federal	Notes
Purchases/Partnerships	47.0	47.0	-	possible flood mgt benefits
Refuge/Meander Zone	8.0	8.0	-	possible flood mgt benefits
Delta Wetlands	7.0	-	-	
Delta/tributary modifications	20.0	-	-	possible flood mgt benefits
Sac River Habitat	11.0	11.0	-	possible flood mgt benefits
Delta Islands/Levee habitat	8.0	3.0	-	
Watershed Management	2.0	2.0	-	
Category III Program (also below)	15.0	15.0	-	C-3 assumed
Recon, feasibility, etc.	3.0	-	-	
	121.0	86.0	86.0	

B. Fish Screening/Passage

Barriers	6.0	-	-	possible flood mgt benefits
Screens	10.0	10.0	-	
Recon, feasibility, etc.	1.0	-	-	
Gravel pit isolation	2.0	-	-	
Category III Program (also below)	5.0	5.0	-	C-3 assumed
CVPIA cost share	37.0	-	-	possible flood mgt benefits
	61.0	15.0	15.0	

C. Exotic Species Management

2.0 - 2.0

D. Monitoring of Ecosystem Health

3.0 1.0 10.0

E. Water Acquisitions

- - 20.0 permanent

Subtotal, Ecosystem

187.0	102.00	133.00
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Water Quality

Watershed management	10.0	10.0	-	
RT water quality management	1.0	-	-	
Pollutant source control	13.0	11.0	2.0	
Land conversion/retirement	5.0	-	8.0	
Underground storage	1.0	-	-	
Constructed wetlands	12.0	-	-	
	42.0	21.0	10.0	

Levee System Vulnerability

12.0 - - incl under Habitat, above

Water Use Efficiency

21.0 - -

Total Program

260.0	123.00	143.00
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